

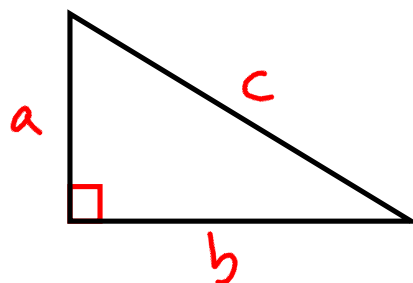
04/25/14 Agenda:

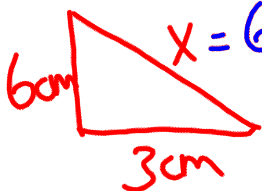
- Review Homework
 - Worksheet 4 - Review of Prisms & Cylinders
- NGA review
 - Continue review on Monday 4/28
 - NGA Final Exam on Tuesday 4/29

Pythagorean Theorem:


- Use only when you have a right triangle
- Use if you have two sides and want to find the length of the third side
- a and b are the legs, c is the hypotenuse

$$a^2 + b^2 = c^2$$



1.) 

$$6^2 + 3^2 = X^2$$
$$36 + 9 = X^2$$
$$45 = X^2$$
$$\sqrt{45} = \sqrt{X^2}$$
$$6.7 = X$$

4. 

$$X^2 + 3.7^2 = 4.2^2$$
$$X^2 + 13.69 = 17.64$$
$$\begin{array}{r} X^2 + 13.69 = 17.64 \\ -13.69 \quad -13.69 \\ \hline X^2 = 3.95 \end{array}$$
$$\sqrt{X^2} = \sqrt{3.95}$$
$$X = 1.99$$

Similar Triangles:

- Similar Triangles have the same shape but different sizes.
- Use proportions to solve for missing sides.
- Set up the proportion by matching corresponding sides.
- Solve by cross multiplying.

Solve for X

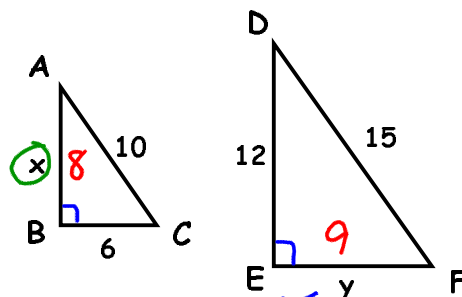
SMALL
BIG

$$\frac{X}{12} = \frac{10}{15}$$

$$15X = 12 \cdot 10$$

$$\frac{15X}{15} = \frac{120}{15}$$

$$X = 8$$



$$\triangle ABC \sim \triangle DEF$$

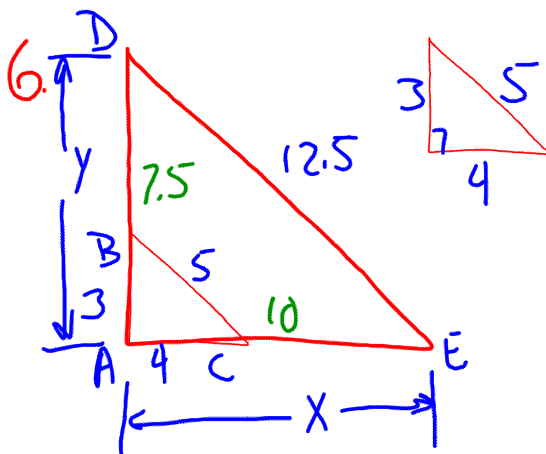
Solve for Y

$$\frac{6}{y} = \frac{10}{15}$$

$$10y = 6 \cdot 15$$

$$10y = 90$$

$$y = 9$$



SMALL
BIG

$$\frac{3}{y} = \frac{5}{12.5}$$

$$5y = 3 \cdot 12.5$$

$$\frac{5y}{5} = \frac{37.5}{5}$$

$$y = 7.5$$

$$\frac{4}{x} = \frac{5}{12.5}$$

$$5x = 4 \cdot 12.5$$

$$5x = 50$$

$$x = 10$$

